The Claims

22. (Previously Presented) A method of providing an information page to a handheld viewing device, comprising the steps of:

requesting an information page at the handheld viewing device;

retrieving the information page from a remote system;

if the information page includes a plurality of frames, then generating an abbreviated version of the information page, wherein the abbreviated version includes a graphical representation of the information page and an image map that identifies the locations of the plurality of frames within the graphical representation of the information page; and

transmitting the abbreviated version of the information page to the handheld viewing device.

23. (Previously Presented) The method of claim 22, further comprising the steps of:

providing a gateway device for receiving the request from the handheld viewing device and for retrieving the information page from the remote system.

24. (Previously Presented) The method of claim 23, further comprising the steps of:

coupling the gateway device to the handheld viewing device via a wireless network.

25. (Previously Presented) The method of claim 23, further comprising the steps of:

coupling the gateway device to the remote system via a wired network.

26. (Previously Presented) The method of claim 25, wherein the wired network is the Internet, and the remote system is a world-wide-web server.

27. (Previously Presented) The method of claim 26, wherein the information page is a web page.

28. (Previously Presented) The method of claim 23, wherein the gateway device stores the information page in a cache and generates the abbreviated version thereof, including the graphical representation and the image map.

29. (Previously Presented) The method of claim 22, further comprising the steps of:

displaying the graphical representation of the information page at the handheld viewing device;

selecting a portion of the graphical representation;

accessing the image map to determine a frame that corresponds to the portion of the graphical representation selected; and

retrieving a graphical representation of the selected frame and displaying it on

the handheld viewing device.

30. (Previously Presented) The method of claim 29, further comprising the steps of:

providing a uniform resource locator (URL) associated with each of the plurality of frames identified by the image map; and

transmitting one of the uniform resource locators to the remote system in response to selecting the portion of the graphical representation.

31. (Previously Presented) The method of claim 22, wherein the graphical representation is a bitmap file.

32. (Previously Presented) The method of claim 22, further comprising the steps of:

if the information page does not include a plurality of frames, then transmitting the information page to the handheld viewing device without abbreviating it into the graphical representation and the image map.

33. (Previously Presented) The method of claim 22, further comprising the steps of:

prior to the transmitting step, reducing the size of the graphical representation of the information page to match the display characteristics of the handheld viewing device.

34. (New) A system for processing information pages using a handheld viewing device, comprising:

a remote system for storing the information pages; and

a gateway device coupling the remote system to the handheld viewing device, wherein the gateway device responds to a request for an information page from the handheld viewing device and retrieves the requested information page from the remote system, wherein if the information page includes a plurality of frames, then the gateway device generates an abbreviated version of the information page, the abbreviated version including a graphical representation of the information page and an image map that identifies the locations of the plurality of frames within the graphical representation of the information page, and transmits the abbreviated version of the information page to the handheld viewing device.

35. (New) The system of claim 34, further comprising a wireless network coupling the gateway device to the handheld viewing device.

36. (New) The system of claim 34, further comprising a wired network coupling the gateway device to the remote system.

37. (New) The system of claim 36, wherein the wired network is the Internet and the remote system is a world-wide-web server.

38. (New) The system of claim 37, wherein the information page is a web page.

39. (New) The system of claim 34, wherein the gateway device includes a cache memory for storing previously requested information pages and for storing the abbreviated versions thereof.

40. (New) The system of claim 34, wherein the handheld viewing device is operable to display the graphical representation of the information page and to receive a selection of a portion of the graphical representation, and wherein in response to the selection of the portion, the handheld viewing device is operable to access the image map to determine a frame that corresponds to the selected portion and to retrieve a graphical representation of the selected frame from the gateway device.

41. (New) The system of claim 40, wherein a uniform resource locator (URL) is associated with each of the plurality of frames identified by the image map and the handheld viewing device transmits one of the URLs to the remote system in response to selecting the portion of the graphical representation.

42. (New) The system of claim 34, wherein the graphical representation is a bitmap file.

43. (New) The system of claim 34, wherein if the information page does not include a plurality of frames, then transmitting the information page to the handheld viewing device without abbreviating it into the graphical representation and the image map.

44. (New) The system of claim 34, wherein the gateway device reduces the size of the graphical representation of the information page to match the display characteristics of the handheld viewing device.

45. (New) A mobile communication device for processing remotely-stored information pages, comprising:

a transmitter for transmitting an information page request to a remote system where the information page is stored;

a receiver for receiving an abbreviated version of the information page in response to the information page request; and

a processor for processing the abbreviated version of the information page, the abbreviated version of the information page including a graphical representation of the information page and an image map that identifies the locations of a plurality of frames within the graphical representation of the information page.

46. (New) The mobile communication device of claim 45, wherein the transmitter transmits the information page request to the remote system via a gateway device that receives the information page request from the mobile communication device and forwards it to the remote system, and in response thereto, the gateway device receives the requested information page from the remote device.

47. (New) The mobile communication device of claim 46, wherein the abbreviated version of the information page received at the receiver is generated at the gateway device.

48. (New) The mobile communication device of claim 45, wherein the transmitter and the receiver communicate via a wireless communication network.

49. (New) The mobile communication device of claim 45, further comprising:

a display for displaying the graphical representation of the information page; and

a selector for selecting a portion of the graphical representation;

wherein the processor processes the information page by receiving a selection signal from the selector and accessing the image map to determine a frame that corresponds to the portion of the graphical representation selected.

50. (New) The mobile communication device of claim 49, wherein the processor retrieves a graphical representation of the selected from and displays it.